

Unit 6 Economic indicators

Assessment: model answers

1 Inflation in Namibia

- (a) Inflation is a sustained increase in the general level of prices in an economy. It has the effect of eroding the real value or purchasing power of money.
- (b) A weighted consumer price index (CPI) is a measure of price inflation affecting consumers, and therefore their cost of living. It is calculated from the movement in the average price of a 'basket' of goods and services purchased by the 'typical' or average household in a country from a sample of different retail outlets.

The basket of goods may include categories of food, clothing and housing, each of which will account for a different proportion of average household spending.

The average price of each product is weighted by the proportion of total household expenditure spent on it each period. So, for example, if on average households spend twice as much on food products as they do on clothes, then changes in food prices will be weighted twice as much as changes in the prices of clothes in the CPI. Increases in the prices of products which account for the largest share of household expenditure have a greater effect on the cost of living than those that account for a much smaller proportion of spending.

The first year of the index is called the base year and the weighted average price of all goods and services in the CPI basket is calculated and set equal to 100. Changes in household spending patterns and the prices of the different goods and services in the 'basket' are then monitored over time by researchers. Monthly or annual changes in the weighted average price of the basket are then compared to the figure for the base year. For example, if the weighted average price of the basket of goods and services has increased by 15% over a given period the index will show a rise from 100 to 115.

Over time, the goods and services consumers buy will tend to change, due to changes in fashions, their tastes and because new goods and services become available, like tablet PCs and 3D televisions. The composition of the basket of goods and services used to measure a CPI, and the weights used to calculate average prices, will therefore be revised from time to time to reflect these changes.

- (c) The article states annual inflation in Namibia fell from 8.8% in 2009 to 4.5% in 2010. This is clearly a move in the right direction towards achieving a low and stable rate of price inflation but at 4.5% per year it is still on the high side. People on low and fixed incomes, such as old age pensioners, the unemployed and single parent families may be particularly disadvantaged by the continued rise in the cost of living if they are unable to increase their incomes at the same rate of inflation. There may be pressure on the government to increase welfare payments to the most venerable. Any increase in spending on such transfer payments will mean cuts elsewhere or higher taxes for employees and firms. Raising tax rates may reduce work incentives and business investment.

Low-income households will spend most if not all of their incomes meeting their basic needs for food, clothing and shelter and so will be the most affected by rising prices. The annual increase in food prices of just 0.8% is therefore

a positive outcome but the 6.2% increase in housing, fuel and power costs could have a significant impact on their living standards. Although these are essential items such that demand for them tends to be relatively price insensitive, some low-income households may not be able to afford to pay the increase in these costs without reducing their food consumption and some may even turn off their heating in winter. This could cause health problems and place government spending on health care under further pressure.

Households with higher incomes will spend more in total than low-income households but proportionately less overall of their incomes. As such the inflation in housing, fuel and power costs may affect them proportionately less than low-income households. High-income households will also tend to spend more on household goods, recreation, culture, travel and communications than low-income households. However, the prices of these product groups have risen by less than the average price level. The Namibian government may therefore be worried that the impact of inflation on the cost of living of high-income households is proportionately less than the impact it will have on the living standards households with low incomes. As a result, relative poverty is likely to increase.

The fall in the average price of alcohol and tobacco, although small, may be a cause for concern because of the health and social problems excessive smoking and drinking can cause. If demand for these products is price elastic even a small fall in price could result in a large expansion in the quantity purchased.

Increases in the costs of education and health care may also be a source of concern for the Namibian government if, as a result, people reduce their consumption and especially those on the lowest incomes who cannot afford the increase in fees and other associated costs and charges. Education can help to reduce poverty and is a driver of future economic growth. A better-educated workforce is a more employable and productive workforce. Similarly, if people spend less on maintaining their health this could result in more days of production being lost due to employee sickness.

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(a) $42,600 - 1,500 = 41,100$

- (b) Changes in the industrial structure of an economy, in technology, in attitudes to work and how firms organize their production can all have an impact on employment patterns.

Most people in developed economies today work in the service sector but many hundreds of years ago most were employed in agriculture and other primary industries. The growth in manufacturing industries and construction attracted a growing number of people to leave agricultural communities to work in factories in urban areas but these industries have since declined in their importance to employment and output in many developed economies.

Large-scale manufacturing in developed economies has become increasingly automated, replacing many full-time jobs especially among males. However, manufacturing in developed economies has also been unable to compete with manufacturing in low-wage economies. Many developing countries have been rapidly expanding their manufacturing industries. Agriculture and mining have therefore been declining in importance as major employers in these economies, although also in part due to mechanization.

At the same time many more females are joining the workforce in many countries and taking paid employment. Social attitudes to women working have changed in many countries and females are also tending to marry and have

children later in life. The rising cost of living in many countries has also attracted more females into work to help maintain the living standards of their families.

Most people work full time, which for many means working Monday to Friday each week, for around 7 to 8 hours each day. However, there has been rapid growth in part-time employment in the last few decades and in Sunday working, especially in many developed economies. These trends are related to the increase in the female participation rate, but also linked to growth in the services sector, and particularly in retailing. Hiring part-time workers allows firms greater flexibility to remain operational for more hours each day and to use more staff during busy periods.

- (c) Although the statement seems inconsistent because the unemployment rate fell to the lowest for 23 years but at the same time total employment decreased, the unemployment rate is a proportion of the total workforce and the change in employment is an absolute number. If the working population has shrunk over time it is possible for the proportion employed to have increased, thereby reducing the unemployment rate despite the actual number of people employed having fallen.
- (d) The economic consequences of unemployment can be significant. Income and output in an economy will be lower than it could otherwise be if there is a high level of unemployment because labour resources are unused. This will restrict economic growth.

Government spending may also have to rise or be diverted from other areas to provide welfare benefits such as income support, low-cost housing and health care for the unemployed. People who lose their jobs will lose their income and may have to rely on charity or government benefits. Unemployed people can also lose their working skills if they are unemployed for a long period of time and, without retraining, they may find it even harder to find work. They may become depressed, possibly even ill, and it may also put a strain on other family members and health-care services. Some unemployed people may lose their homes if they cannot meet their mortgage repayments and some may even be drawn into crime.

If government spending has to increase to tackle the social and financial problems caused by unemployment it will have to be paid for from higher taxes on firms and people in work, or public expenditures on other public services or investments, such as on new schools or roads, will have to be cut.

3

- (a) Economic growth involves a sustained increase in the real output of a country, generally measured as its gross domestic product (GDP). A sustained growth in real GDP means that each year the economy will have produced more goods and services than the previous year, and the total income of the economy will be higher even after allowing for the impact of any inflation on prices and the purchasing power of that income.

Economic growth will therefore raise living standards and economic welfare. Higher real incomes allow people to buy more of the goods and services they need and want, and for the economy to invest more in improving schools, health care, roads and other vital infrastructure. However, economic welfare will also depend on what goods and services are produced, what impact they may have on the environment, and how the increased income is distributed. For example, if the increased output and income is created by increased production that damages the environment, and if the additional income generated by growth is only shared among a few very rich people, then economic welfare for most people will not have improved and may even have reduced.

- (b)** There will always be some frictional unemployment in an economy. It occurs when workers change jobs and spend some time looking for new ones. This type of unemployment is therefore usually short term and can be caused by people leaving jobs they dislike, moving to a different town or looking for higher paid work.

However, cyclical and structural unemployment can be far more serious and long-lived.

Cyclical unemployment occurs during an economic downturn as consumer demand for goods and services falls. In response, firms will cut back their production and workforces. As people lose their jobs and incomes, demand falls further. In very deep recessions there can be a high proportion of people unemployed with very few opportunities to find alternative employment. This type of unemployment is a real concern for the government, although economies will come out of recession in time and the rise in consumer demand will lead firms to increase their output and demand more labour.

Structural unemployment results from long-term changes in the structure of the economy as entire industries close down due to new technologies and a lack of demand for their goods and services. People employed in these industries will have skills that are out of date and not relevant to new, more advanced industries. As a result, they will become occupationally immobile and unemployed for very long periods. This can have a serious impact on particular regions within a country with high levels of unemployment compared with rates in other regions. Retraining workers can help them move into other jobs if they are available. In some cases workers will have to leave the region in order to seek employment elsewhere. New industries will also need to be encouraged to develop. In many developed countries, structural unemployment has occurred as the economies have moved from labour-intensive production, such as in agriculture or coal mining, to capital-intensive, service-based industries.

- (c)** Consumers can benefit from economic growth if it delivers more and improved goods and services to satisfy their wants and to improve their standards of living. Prices may also come down as firms expand and enjoy economies of scale and as the market supply of many goods and services increases. Public sector provision of education, health care and other public services may also improve if, as a result of growth in incomes, government tax revenues have increased.

However, economic growth may not benefit consumers if, for example, it is mainly the result of increased production of capital goods such as new defence equipment for the armed forces, if the increase in production harms the environment or if the benefits of growth are not widely distributed. Technical progress may also replace workers with machines so more people become unemployed for long periods of time.

Firms can benefit from growth in consumer spending and also growth in their productive scale. Additional demand and revenues will allow firms to expand and as they grow they may enjoy economies of scale, or reductions in their unit costs of production. Increased profits will also provide finance for firms to invest in the research and development of new products and processes. However, growth may also create more competition as more businesses are formed.

As incomes and expenditures grow, tax revenues from direct and indirect taxes will automatically rise without any increase in tax rates. The additional revenue can be used by government to reduce poverty and to invest in more and better roads, schools, health care, crime prevention and other public

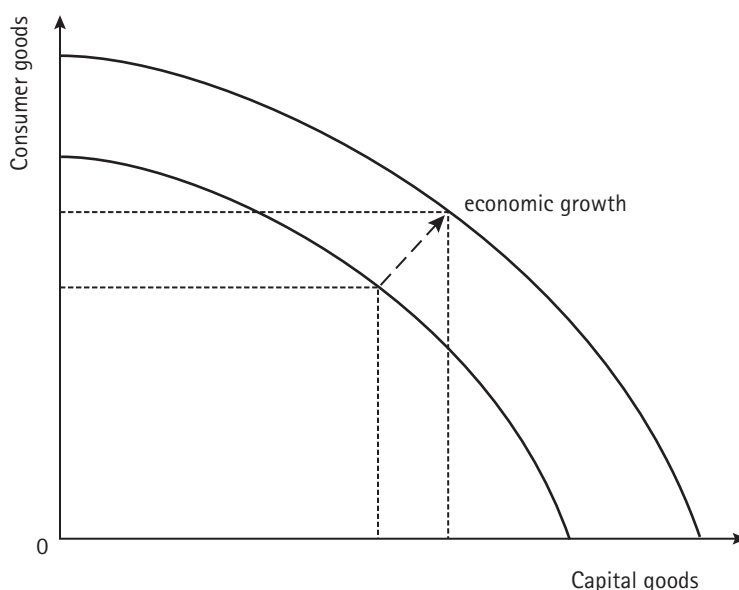
services. It can also be used to pay off any public sector debt that might otherwise be expensive in terms of annual interest charges, money that could otherwise be used more productively by the government to improve economic and social welfare.

4

- (a) Investment involves the purchase or development of productive assets. Investments undertaken by private sector firms may include the construction or purchase of new factories and offices, new machinery, vehicles and computers to be used in the production and sale of other goods and services. Public sector investment is spending on fixed assets by government organizations. This may also include the construction of new factories and offices, new machinery, vehicles and computers, but may also include investments in new schools and colleges, hospitals, public transport, road networks and airports.
- (b) Investment in new capital is vital for economic growth. Investment is not only needed to replace old and worn out productive assets to maintain the same level of output in an economy but also in new assets to expand the productive capacity of an economy. If old and worn out assets are not replaced then the productive capacity of an economy will shrink and fewer goods and services will be produced. The prices of many goods and services will tend to rise as their market supply falls relative to demand. Employment, incomes and living standards will also fall.

Investments in new productive assets by firms will allow them to expand their scale of production, lower their average costs and produce more goods and services in the future. Similarly, public sector investments in education and health care can produce a more highly skilled workforce while investments in roads and airports will reduce travel times and costs for many private sector firms. Governments can also subsidize private sector investments in the research and development of new, more efficient processes and products. Technical progress is a major driver of economic growth.

Increased investment spending in an economy will have the effect on shifting its production possibility curve (PPC) out to the right. This is shown in the diagram below. It shows the economy is now able to produce more consumer and capital goods because it now has more resources.



Economic growth means there has been an increase in the real output of an economy. An increase in output compared with output in previous years can improve the living standards of people by providing them with more goods and services and incomes to enjoy.

- (c) In a market economy all resources are owned and controlled by private individuals and firms. Consumers will buy goods and services to satisfy as many of their wants as they can, and private sector firms will produce these goods and services to earn as much profit as they can. What is produced therefore depends on what consumers want and are willing to pay for. Firms will allocate scarce resources to the production of those goods and services that are the most profitable. The profit motive of firms and the preferences of consumers therefore determine how resources are allocated in a market economy.

In contrast, in a mixed economy decisions about how best to allocate resources are also taken by the public sector as well as the private sector. The public sector consists of organizations owned, controlled and financed by the government. It will often provide many essential goods and services that contribute to social and economic welfare and which may not otherwise be produced by private firms, such as free education, health care, road networks, policing and street lighting. Public sector provision is mostly funded from taxes levied on private sector incomes and wealth. Government objectives concern promoting economic growth, employment and improvements in living standards.

- (d) Economic growth will increase real average incomes. As real incomes grow, consumer spending patterns are likely to change. Consumers will be able to spend more obtaining goods and services that satisfy their wants and not just their needs for basic foodstuffs, clothing and shelter. As a result, consumer spending on consumer goods and services is likely to rise as an economy grows. This will stimulate growth in the manufacturing, construction and services sectors. They will increase in importance in terms of their contribution to output and employment relative to primary industries such as agriculture, fishing and mining.

As an economy develops further and real incomes continue to rise, consumers may allocate an increasing proportion of their incomes on financial and personal services, and on leisure pursuits. For example, consumers may save more in pension schemes, spend more on repaying mortgages for homes they have bought and buy more insurance to protect their health and increased wealth. Similarly, they may spend more on eating out at restaurants, having hair and spa treatments and going on holidays. This will boost growth in these service sectors relative to more traditional services such as retailing and cleaning. The public sector may also expand as government revenues from taxes on incomes and expenditures rise and people demand more and better education, health care and other public services.